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DESERT PLANT LIFE

SOME ETHNOBOTANICAL NOTES ON THE SERI INDIANS

WATERCRAFT OF CARRIZAL REED

A STUDY OF THE GENUS LOPHOPHORA, THE PEYOTE

NOVEMBER [illegible] twenty-five cents

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Editor: Ellen Rooksby. *Associates:* F. Berger, Murray Skinner, Mace Taylor, Jr., Edward Taylor

EDITORIAL CONTRIBUTORS

FRANK K. BALTHIS
ELISE BERGER
DR. LEON CROIZAT
LT. E. YALE DAWSON
LT. REID MORAN
DR. ADELE LEWIS GRANT
H. HERRE
WILLIAM HERTRICH
LT. GEORGE LINDSAY

Chicago Cactus Society Secretary: H. Nordlinger, 5324 N. Bernard Street, Chicago, Illinois.

Long Beach Cactus Club Secretary: W. S. Bell, 3014 East Second Street, Long Beach, California.

Los Angeles S. W. Cactus Growers Secretary: Mamie Abercrombie, 1342 E. 76th Street, Los Angeles.

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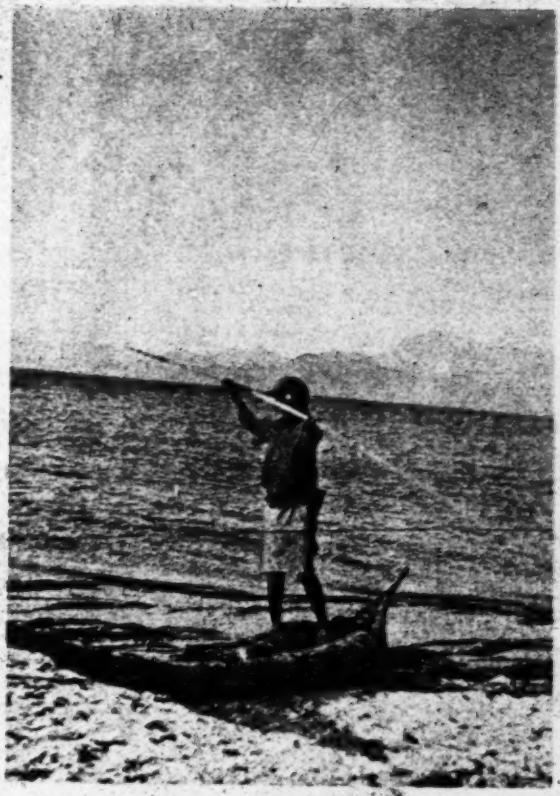

A rare photograph of the last native carrizal reed balsa made by the Seris in 1922. Tiburon Island.

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DESERT
PLANT LIFE

SIXTEENTH YEAR NUMBER 9

LT. E. YALE DAWSON, A.A.F.
Scripps Institution
La Jolla, California

SOME ETHNOBOTANICAL NOTES ON THE SERI INDIANS

105 If the natural resources of a region may be said to reflect the degree of
121 cultural and social development of its aboriginal people, we may easily understand why the Seris of Sonora, now approaching extinction and with much modified habits and culture, are considered the most primitive and savage of American Indians. Certainly the arid coast of Sonora, destitute
[133] of water but for a few widely separated, stagnant holes, with a dry, rocky soil habitable only by the most frugal and thorny of desert vegetation, presents little in the way of resources to a native people. It was, indeed,
[202] only along the ocean shore that the Seris found animal food sufficient to sustain them, principally, the sea turtle and the pelican. This food source proved adequate to support a tribe of some 2000 in pre-Columbian times, but the limited habitat of the pelican and turtle brought about extreme isolation of the people. Thirty-mile-long Tiburon Island became their principal home, separated from the mainland by the narrow but tempestuous channel, El Infiernillo, across which they frequently voyaged in their buoyant balsas to search out vegetal supplements to their monotonous sea food diet. It is this use of vegetable materials, not only as food but in other phases of the domestic economy of these people in earlier times, with which these notes are particularly concerned.

225 Primary occupation of the Seris aside from their continual movement to and from the water holes was, necessarily, their search for food, for they cultivated nothing and conserved little. Fish were exceedingly abundant
[227] in the waters around their island, but their very limited tool sense, providing them with almost no fishing devices, excluded much of this food from their diet. Clams and other shellfish were to be had, but it was the abundant green sea turtle, feeding upon luxuriant growths of marine grass, *Ruppia maritima*, in the shallow, sandy lagoons along El Infiernillo, that provided their meat staple. The turtles could be captured with ease during egg laying season as they crawled over the beach, but at other times they had to be
396 speared from a watercraft. No sizable timber grows in Seriland and before the advent of flotsam boards and hoop-iron it would have strained the

ingenuity of a modern shipbuilder to have constructed a boat. These simple, desert people, however, through centuries of struggle for life in their desolate realm had learned to use every natural material available to them, however laborious the tasks and inefficient the products. The carrizal reed, *Phragmites communis*, grows about the few permanent water holes of Seriland, and from countless numbers of these slender, buoyant canes they built their watercraft. The reeds were stripped of leaves and gathered in long bundles, bound together and gradually augmented by more and more interlaced canes until a bundle 18 to 30 feet long and 1½ feet in diameter, tapering at both ends, was made. Three of these were then bound together with cords of fiber or human hair, making a maneuverable one or two man raft, easily transported to the shores.

The mesquite tree, *Prosopis juliflora*, provided fiber for cords. The flexible outer tissues of the roots were stripped off, soaked and progressively pounded, split and worked between hand and mouth until very slender, fibrous threads were obtained which were then twisted into cords. In some cases a coarse, rough fabric was woven from these fibers, but most garments were made of pelican skins. The strips of workable mesquite root or sometimes yucca fiber were also used in making doughnut-shaped head pads which aided in balancing the capacitous earthen water jars as they were carried on the heads of the women over rough and stony trails from water hole to camp site.

While occupying the turtle fishing camps on El Infiernillo during the good season, vegetable supplements to the fishy diet were few. Every nourishing seed or woody fruit yielded by the desert was carefully gathered; even the tiny seeds of the sea grass, *Ruppia*, were sorted from beach drift and made into meal. Never did the Seris learn to cultivate any crop or domesticate any animals other than the half wild coyote dogs that lived in mutual toleration with them. Even had they done so, their success in the barren, waterless land would have been small.

Sterile as is the Seri's hinterland, for a time each summer the thorny plants with which it is so profusely stocked ripen an abundant crop of fruit. The cacti in particular yield a wonderful harvest of luscious and succulent fruits, and toward this fortuitous supply the Seris were accustomed to move in June and July. The foothills of Sierra Seri on the mainland are adorned with great numbers of giant cacti, *Pachycereus Pringlei*, *Carnegiea gigantea* and *Lemaireocereus Thurberi* from which the luscious pitahayas were readily knocked down when ripe. The Indians wandered into the cactus forest and after a simple ritual marking the beginning of the feast, proceeded to gorge themselves for weeks on the succulent fruit until waning supply and cloying appetite drove them back to more severe food-getting activity by the sea. They did not customarily find it necessary to leave the cactus forest, however, as soon as the supply of fruits was no longer sufficient, for by the time the fruiting season was ended they had provided themselves with a second harvest. The pitahayas, gorged in such tremendous quantity throughout the season, were very imperfectly digested; the miriads of hard seeds, particularly, passed through the system unchanged and with the preservation of these in mind the Indians carefully collected with the aid of large sea shells all such seedy discharges and let them dry in the desert sun. Thus, as the supply of fresh fruit faded they proceeded to the use of this hoard

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1. A basket of cactus meal.

342 2. A Seri village on Tiburon Island. Note the large shells of the sea turtle that serves as food.

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342 3. Making the Seri basket. House is constructed of ocotillo branches and brush.

[p. 135]

of nutritious material which was ground to powder on their stone ahsts, winnowed in shallow baskets and made into a meal or paste.

The abundant cacti of many species served several other functions in the domestic economy of the Seris. The thorny cholla whose insipid fruits were not fit to eat and whose spines were a constant threat to the unprotected bodies of the Seris, found one use, nevertheless, in the burial procedure. After a body was partly covered with earth in the three foot deep grave, it was densely overlaid with chollas before leveling, to discourage the coyotes from digging for the body.

The dry skeletons of the giant cacti provided the long, cylindrical poles used in knocking off ripe pitahayas as well as in all other instances in which a straight, slender pole was needed. Since the advent of the open boat in modern times, the cactus skeleton has come in for a new use, for after trituration between stone ahst and hupf, it was found to yield a satisfactory caulking compound when mixed with sea-lion oil.

The barrel cacti, *Ferocactus Wislizenii* and *F. Coulteri*, though ordinarily abundant on the Sonoran desert are rare in Seriland and practically absent from Isla Tiburon where they may easily have been exterminated by the improvident Seris during their centuries of occupancy on account of their recognized value as water providers on the wastelands over which the Seris so frequently ventured.

These Indians found housing no problem, for, living under a climate in which frost is rare and rain infrequent, they found little need for shelters except for protection against the blazing desert sun. Camps that were occupied for more than a day or two, however, usually saw the appearance of a group of crude sun shelters. These were usually made of long, flexible ocotillo branches, *Fouquieria splendens*, stuck in the sand and fashioned into an arched framework over which a more or less complete covering of brush was piled. If, by the sea, a windbreak were desired, the brush top and siding were usually augmented by the addition of several empty turtle shells.

On the delta plain of the Rio Sonora, the mesquite, *Prosopis juliflora*, grows in remarkable luxuriance, these gnarled, spiny trees forming an almost continuous open forest 20-40 feet high. Its fruit, consisting of small, hard beans borne in slender, woody pods forms a concentrated, starchy food that the Seris found highly nutritious if not appetizing. In late summer when all fresh vegetable food had withered and disappeared, provided the turtle fisheries had not yet attracted them back to their island, they often spent some weeks gathering the beans and grinding them into a meal which was eaten as a watery atole or as a paste mixed with sea-lion oil. The more straggly and thorny cat's claw mesquite, *Acacia Greggii*, and the ironwood, *Olneya tesota*, also yielded woody beans in limited quantity.

In the deeper gorges of the mountains the Seris found *Guaiacum Coulteri* yielding a berry of medicinal properties and also *Jacquinia pungens* which produced a nut, edible when not quite ripe, and forming a favorite rattlebead when dry.

Along sandy washes, particularly on the lower flood plain of the llano grows a low, shrubby weed, *Hymenoclea monogyra*. Although during times of drought it shrinks to stunted tussocks, after periods of heavy rain its flourishing fens produce abundant seeds eaten both by the beasts of the plain and formerly by the Seris.

Before the advent of the tin can and the cardboard carton, basketry was an important handicraft among these Indians

[Text continues on p. 138--Analyst]

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Preparing a mesquite bean meal cake on the stone metate.

Seri women carrying firewood back to camp. Note the baskets and the head pads made of mesquite or torote.

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an important handicraft among these Indians. They made a shallow, coil type basket such as is characteristic of many southwestern tribes. The Seri basket, however, was remarkable for its extreme lightness in proportion to capacity, a quality due to the spongy character of the coil made of a whisp of splints of the torote. Several torotes are found in the region, the commonest species being *Jatropha cardiophylla*. Also used were the torote amarillo, *Jatropha spatulata*, torote blanco, *Bursera microphylla*, and torote prieto, *Bursera laxiflora*. The woof consisted of splints of palo blanco, *Acacia Willardiana*, or of baraprieta, *Caesalpinia gracilis*, deftly interlaced by means of a bone awl to form a smooth, practically waterproof utensil.

In pre-Columbian times the Seris commonly sought wild game, mostly deer, without the aid of weapons, using only their tremendous physical endurance against their prey, chasing the animal until it was exhausted and could be thrown to the ground. With the introduction of iron, however, the development of the bow and arrow achieved prominence, for the shaping and fastening of points had long retarded the exploitation of these implements. Few straight stemmed or straight grained plants grow in Seriland suitable for making arrow shafts, but on the flanks of the deeper gorges of Sierra Seri and Sierra Kunkaak on Tiburon Island, the Indians found one leafy shrub that filled the need, *Sapium biloculare*. The juice of this plant is also said to have been used for arrow poison. The bow was preferably of palo blanco, wrapped and strung with mesquite fiber cord.

The modern Seri tribe consists of barely more than 100 souls, with early extinction threatening from imported diseases. Their natural habits are now vastly modified and they live a comparatively sedentary life near the village of Kino, scavengering for fish heads and other refuse discarded by the fishermen, now and then fishing for themselves when in need. Every year, however, they trek off to the cactus forest for the annual feast, and in late summer many may be seen camping among the mesquite groves near the Kino well where an abundance of both mesquite beans and water makes for easy living.